Appln No. 09/503,022

Docket No. 14XZ00055 / GEM-0228

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

## Listing of Claims:

1. (currently amended) A method of treatment of a sequence of x-ray images of a body, comprising:

acquiring an image sequence including a current image and a preceding image, filtering the preceding image, and applying a displacement vector to the preceding filtered image, thereby defining a displaced preceding filtered image;

elaborating for each acquired current image of a current filtered image from the acquired current image and from the preceding filtered image; and

visualizing the elaborated and filtered image sequence;

wherein for each acquired current image, a displacement of the current image is determined relative to the acquired preceding image in an image acquisition plane, the displaced preceding filtered image is elaborated by spatially displacing the preceding filtered image, taking the displacement of the current image into account, and the current filtered image is elaborated by a weighted average by applying a first weighting coefficient to the displaced preceding filtered image and a second weighting coefficient to the acquired current image between the acquired current image and the displaced preceding filtered image, so as to improve the quality of the images visualized.

2. (original) The method according to claim 1, in which the body is laid on a movable table, wherein the displacement of the current image is determined in the image acquisition plane from the value of displacement of the table and spatial orientation and distance of the acquisition plane relative to the table.

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- 3. (previously presented) The method according to claim 1, wherein the displacement of the current image is determined in the image acquisition plane from content of the acquired images.
  - 4. (canceled)
- The method according to claim [[4]] 1, wherein the 5. (currently amended) sum of the first and the second weighting coefficients is equal to one.
- The method according to claim [[4]]  $\underline{1}$ , wherein the 6. (currently amended) first weighting coefficient is less than the second weighting coefficient.
- The method according to claim [[4]] 1, wherein the 7. (currently amended) first weighting coefficient is equal to about 0.2.
- The method according to claim [[4]] 1, wherein the 8. (currently amended) second weighting coefficient is a function of the first weighting coefficient.
- The method according to claim 7, wherein the first (previously presented) weighting coefficient is a function of the acquired current image, the displaced preceding filtered image, or both.
- A method of treatment of a sequence of x-ray 10. (currently amended) images of a body, comprising:

acquiring an image sequence including a current image and a preceding image, the current image being displaced relative to the preceding image;

filtering the preceding image, and providing a displaced preceding filtered image by taking the displacement of the current image relative to the preceding image into account and spatially displacing the preceding filtered image;

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calculating a current filtered image as a function of the acquired current image and the displaced preceding filtered image; and

visualizing the current filtered image sequence;

wherein for each acquired current image, a displacement of the current image is determined relative to the acquired preceding image in an image acquisition plane, and the current filtered image is elaborated by a function rule applied to the acquired current image and the displaced preceding filtered image, so as to improve the quality of the images visualized;

wherein the function rule comprises a weighted average, and the current filtered image is elaborated by a weighted average according to the following:

applying a first weighting coefficient to the displaced preceding filtered image and a second weighting coefficient to the acquired current image.

## 11. (canceled)

- The method according to claim [[11]] 10, wherein 12. (currently amended) the sum of the first and the second weighting coefficients is equal to one.
- The method according to claim [[11]] 10, wherein 13. (currently amended) the first weighting coefficient is less than the second weighting coefficient.
- The method according to claim [[11]] 10, wherein 14. (currently amended) the second weighting coefficient is a function of the first weighting coefficient.